



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,814	08/21/2002	Heng-Chien Chen	TRUP0003USA	7778

27765 7590 06/21/2004

NAIPO (NORTH AMERICA INTERNATIONAL PATENT OFFICE)  
P.O. BOX 506  
MERRIFIELD, VA 22116

EXAMINER

GRIER, LAURA A

ART UNIT	PAPER NUMBER
----------	--------------

2644

DATE MAILED: 06/21/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/064,814

Applicant(s)

CHEN, HENG-CHIEN

Examiner

Laura A Grier

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

Art Unit: 2644

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-5, 10, 11-15, and 19- 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art (AAPA) in view of Shdema et al., Pub. No. 20020072816.

Regarding **claim 1**, AAPA (pages 1 and 2, paragraphs 0004 and 0005) discloses an audio system comprising a computer sound card for producing multichannel audio using a sound chip, which reads on a signal broadcasting circuit, a sound card for a computer, and a sound chip electrically connected the signal broadcasting circuit, wherein it is obvious that the sound card uses an interface to connect to the computer as evident by the fact that the computer sound card is used by the audio system, wherein the audio system constitutes as a computer. AAPA further discloses the plurality of audio signal channels output to a plurality external speakers. However, AAPA fails to specifically disclose the audio system (signal broadcasting circuit) comprising a 1<sup>st</sup> transceiver for wirelessly transmitting digital audio signals to external speakers, a plurality of wireless speakers, a 2<sup>nd</sup> transceiver, a D/A converter, and an amplifier.

Regarding the 1<sup>st</sup> wireless transceiver, the plurality of wireless speaker modules, the 2<sup>nd</sup> transceiver, the D/A converter, and the amplifier (herein, wireless transmission components), in

Art Unit: 2644

similar field of endeavor, Shdema et al. (herein, Shdema) discloses an audio system comprising wireless transceiver (110), which reads on a 1<sup>st</sup> transceiver, for transmitting digital audio streams (signals) to a computerized speaker (figure 1-114F and page 4, paragraph 0038) via wireless transceiver (112), which indicates a wireless speaker module;

and Shdema further disclose multiple wireless transceivers coupled to the speakers (page 11, claim 3 and figure 3), which reads on a plurality of wireless speaker modules;

wireless transceiver (112), which reads on a 2<sup>nd</sup> transceiver;

D/A converter(s) for converting the digital signals to an analog signal (figure 4, reference 154A/B – page 7, paragraph 0071), a power amplifier array (164) for amplifying the analog signals and driving to the computerized wireless speakers (114F – page 6, paragraph 0066), which reads on amplifier.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA by implementing wireless transmission components for the purpose of establishing an enhanced sound system with a wireless network for the transmission of multichannel audio.

3. Regarding **claim 11**, AAPA (pages 1 and 2, paragraphs 0004 and 0005) discloses an audio system comprising a computer sound card for producing multichannel audio using a sound chip, which reads on a signal broadcasting circuit, a sound card for a computer, and a sound chip electrically connected the signal broadcasting circuit, wherein it is obvious that the sound card uses an interface to connect to the computer as evident by the fact that the computer sound card is used by the audio system, wherein the audio system constitutes as a computer. AAPA further discloses the plurality of audio signal channels output to a plurality external speakers. However,

AAPA fails to disclose the audio system (signal broadcasting circuit) comprising a 1<sup>st</sup> transceiver for wirelessly transmitting digital audio signals to external speakers, a multichannel wireless speaker module comprising, a 2<sup>nd</sup> transceiver, a plurality of D/A converters, a plurality of amplifier, and plurality of speakers

Regarding the 1<sup>st</sup> wireless transceiver, the multichannel wireless speaker module, the 2<sup>nd</sup> transceiver, the D/A converters, the amplifiers and speakers (herein, wireless transmission components), in similar field of endeavor, Shdema et al. (herein, Shdema) discloses an audio system comprising wireless transceiver (110), which reads on a 1<sup>st</sup> transceiver, for transmitting digital audio streams (signals) to a computerized speaker (figure 1-114F and page 4, paragraph 0038) via wireless transceiver (112), which indicates a multichannel wireless speaker module; wherein each module (114) comprises

wireless transceiver (112), which reads on a 2<sup>nd</sup> transceiver;

D/A converter(s) for converting the digital signals to an analog signal (figure 4, reference 154A/B – page 7, paragraph 0071), a power amplifier array (164) including a plurality of amplifiers, each individually associated with a different frequency, which reads on a plurality of amplifiers, for amplifying the analog signals and driving to a plurality of speaker elements associated with a particular frequency (figure 4, reference 166-172), which reads on a plurality of speakers of a speaker module (page 6, paragraph 0066).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA by implementing wireless transmission components for the purpose of establishing an enhanced sound system with a wireless network for the transmission of multichannel audio.

Art Unit: 2644

Regarding **claim 2 and 12**, respectively, AAPA and Shdema (AAPA combination) further discloses everything claimed as applied above (see claim 1 and 11, respectively). However, AAPA fails to specifically disclose the audio system (signal broadcasting circuit) comprising a multiplexer, and an A/D converter, therein as claimed.

Shdema discloses an audio system comprising a multiplexer (148 – paragraph 0051-0053), which reads on a multiplexer. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement a multiplexer coupled to the sound card which outputs the signal for the purpose of multiplexing/selecting among the audio signals and preparing the audio signals for output for further processing and transmission.

Even though, AAPA combination (Shdema) discloses an A/D converter (144), Shdema fails to disclose an A/D converter receiving the selected output of the multiplexer. However, it would have been obvious to one of the ordinary skill in art to implement an A/D converter at the output of the multiplexer for digitizing an analog signal output by the multiplexer, wherein, it is a common technique for a multiplexer to process both analog and digital signals. And, further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an A/D converter at the output of multiplexer, since it has been held that rearranging parts of an invention involves only routing skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding **claim 3 and 13**, respectively, AAPA combination further discloses everything claimed as applied above (see claim 1 and 11, respectively). AAPA combination (Shdema) discloses an audio management system (102), which includes processors (CPU-120/DSP-122)

Art Unit: 2644

for encoding and decoding the audio signal and controlling the audio management system (page 4, paragraphs 0039-0044 and figure 2), which reads on a compressing circuit, and obviously reads on a packaging circuit as evident of the encoding/compressing.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Shdema combination by implementing an audio management system comprising a CPU/DSP (packaging and compressing circuit) for the purpose of adequately preparing/formatting the audio signals and data for transmission.

Regarding **claim 4 and 14**, respectively, AAPA combination further discloses everything claimed as applied above (see claim 1 and 11, respectively). AAPA combination (Shdema) obviously discloses the sampling and control circuit as evident by the A/D converter and the sample rate converter are coupled to the multiplexer, and signals from both are processed and transmitted accordingly from the multiplexer to the audio management system (paragraph 0053).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA combination by implementing a sampling and control circuit for the purpose of controlling the multiplexing process of the multiple signals input to the multiplexer.

Regarding **claim 5 and 15**, respectively, AAPA combination further discloses everything claimed as applied above (see claim 1 and 11, respectively). AAPA combination (Shdema) discloses the speakers comprising a local DSP (152), reads on a processor controlling the operation of the wireless speaker module (paragraphs 0069-0070).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA combination by implementing a processor for the purpose of controlling various operations relating to the speakers such as, processing the audio streams according to the speaker audio control data, and applying cross-over functions as taught by Shdema.

Regarding **claim 6 and 16**, respectively, AAPA combination further discloses everything claimed as applied above (see claim 1 and 11, respectively). AAPA combination (Shdema) discloses that particular speakers are selected (page 11, claim 2, page 6, paragraph 0065) which indicates that channels are selected and processed by the particular speakers via the network including the processor (local DSP -152 - page 7, paragraph 0069-0070) found with the speaker modules, which reads on channel selector and processor.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA combination by implementing a channel selector for determining how many channels will be processed and controlled for output by the selected speakers .

Regarding **claim 10 and 19**, respectively, AAPA combination further discloses everything claimed as applied above (see claim 1 and 11, respectively). AAPA combination (AAPA) discloses the sound card can be connected to a joystick and a microphone (paragraph 0005), which supports the sound card of the sound card comprising a joystick input port, and microphone input, therein.



4. **Claims 7-8 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA combination in view of Zuqert et al., U. S. Patent No. 6466832.

Regarding **claim 7 and 17**, respectively, AAPA combination further discloses everything claimed as applied above (see claim 5 and 15, respectively). Even though, AAPA combination comprises an audio management system along with a controlling local DSP, AAPA combination fails to provide a diagnostic circuit.

Regarding the diagnostic circuit, in a similar field of endeavor, Zuqert et al. (herein, Zuqert) discloses wireless audio speakers. Zuqert's disclosure a receiver (24/26) comprising a wireless speaker (44) which includes a processor (figure 7 - 40) comprising a watchdog timer coupled to a DSP and logic means, which obviously indicates a diagnostic circuit as evident by the fact that timer resets the system upon any malfunctions (col. 10, lines 51-53).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA combination by implementing a timer (diagnostic circuit) for the purpose of monitoring the performance of various components/devices and enabling the system to reset itself upon any malfunctions.

Regarding **claim 8**, even though AAPA combination comprises an audio management system, AAPA combination fails to specifically disclose provide a timing control circuit.

Regarding the timing control circuit, in a similar field of endeavor, Zuqert discloses wireless audio speakers. Zuqert's disclosure a receiver (24/26) comprising a wireless speaker (44) which includes a processor (figure 7 - 40) comprising a watchdog timer with reset means coupled to a DSP and logic means which provide control signals to a D/A converter, which obviously indicates a timing control circuit as evident by the fact that timer resets the system

(including function of all components coupled thereto) upon any malfunctions (col. 10, lines 51-53).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA combination by implementing a timing control circuit for the D/A converter for the purpose of ensuring adequate and timely control processing of the audio signals as they are processed by the D/A converter and other various components/devices and enabling the system to reset itself upon any malfunctions.

5. **Claim 9 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA combination in view of Kerr, SR., Pub. No. 20020152223.

Regarding **claim 9 and 18**, respectively, AAPA combination further discloses everything claimed as applied above (see claim 1 and 11, respectively). AAPA combination (Shdema) discloses the use of IEEE protocol 1394 or the like. However, AAPA combination fails to disclose the IEEE 802.11b networking standard and the transmitted signals as direct sequence spread spectrum (DSSS) signals.

Regarding the IEEE 802.11b networking standard and DSSS signals, Kerr discloses a wireless connection between various communication devices, using the IEEE 802.11b networking standard (page 2, paragraph 0034, lines 1-5) and DSSS environment (page 2, paragraph 0034, lines 9-12), which indicates DSSS signals .

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA combination by using IEEE 802.11b networking standard for the purpose of ensuring efficient and proper operation of the transmitter for

Art Unit: 2644

transmitting the audio signals to wireless speakers, and DSSS signal for the purpose of ensuring efficient transmission rates of the signals in a wireless network or environment in a home or office.

6. Regarding **claim 20**, AAPA (pages 1 and 2, paragraphs 0004 and 0005) discloses an audio system comprising a computer sound card for producing multichannel audio using a sound chip, which reads on a signal broadcasting circuit, a sound card for a computer, and a sound chip electrically connected the signal broadcasting circuit, wherein it is obvious that the sound card uses an interface to connect to the computer as evident by the fact that the computer sound card is used by the audio system, wherein the audio system constitutes as a computer. AAPA further discloses the plurality of audio signal channels output to a plurality external speakers. However, AAPA fails to specifically disclose the audio system (signal broadcasting circuit) comprising a 1<sup>st</sup> transceiver for wirelessly transmitting digital audio signals to external speakers, a multiplexer, an A/D converter, a plurality of wireless speakers, a 2<sup>nd</sup> transceiver, a D/A converter, and an amplifier.

Regarding the 1<sup>st</sup> wireless transceiver, the multiplexer, the plurality of wireless speaker modules, the 2<sup>nd</sup> transceiver, the D/A converter, and the amplifier (herein, wireless transmission components), in similar field of endeavor, Shdema et al. (herein, Shdema) discloses an audio system comprising an multiplexer (148 – paragraph 0051-0053), which reads on a multiplexer. Thus, it would have been obvious to one of the ordinary to implement a multiplexer coupled to the sound card which outputs the signal for the purpose of multiplexing/selecting among the audio signals and preparing the audio signals for output for further processing and transmission. Shdema discloses a wireless transceiver (110), which reads on a 1<sup>st</sup> transceiver, for transmitting

Art Unit: 2644

digital audio streams (signals) to a computerized speaker (figure 1-114F and page 4, paragraph 0038) via wireless transceiver (112), which indicates a wireless speaker module;

and Shdema further disclose multiple wireless transceivers coupled to the speakers (page 11, claim 3), which reads on a plurality of wireless speaker modules;

wireless transceiver (112), which reads on a 2<sup>nd</sup> transceiver;

D/A converter(s) for converting the digital signals to an analog signal (figure 4, reference 154A/B – page 7, paragraph 0071), a power amplifier array (164) for amplifying the analog signals and driving to the computerized wireless speakers (114F – page 6, paragraph 0066), which reads on amplifier.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA by implementing wireless transmission components for the purpose of establishing an enhanced sound system with a wireless network for the transmission of multichannel audio.

Even though, AAPA combination (Shdema) discloses an A/D converter (144), Shdema fails to disclose an A/D converter receiving the selected output of the multiplexer. However, it would have been obvious to one of the ordinary skill in art to implement an A/D converter at the output of the multiplexer for digitizing an analog signal output by the multiplexer, wherein, it is a common technique for a multiplexer to process both analog and digital signals. And, further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an A/D converter at the output of multiplexer, since it has been held that rearranging parts of an invention involves only routing skill in the art. *In re Japikse*, 86 USPQ 70.

***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. **Claims 1-9, 11-18 and 20** are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 11, and 20 of copending Application No. 10064813 (herein, 813) in view of Weikel et al., U. S. Patent No. 6529787.

Regarding **claim 1**, 813 discloses in claim 1, a signal broadcasting circuit, which reads on a signal broadcasting circuit; a 1<sup>st</sup> transceiver, which reads on a 1<sup>st</sup> transceiver; a plurality of wireless speaker modules, which reads on wireless speaker module; a 2<sup>nd</sup> transceiver, which reads on a 2<sup>nd</sup> transceiver; a D/A converter, which reads on a D/A converter; an amplifier, and a speaker. However, 813 fails to disclose a sound card for a computer, a sound chip, and interface (herein, computer audio components).

Regarding the computer components, in a similar field of endeavor, Wickle discloses a multimedia computer comprising a sound chip for generating audio signal output to external speakers (col. 2, lines 62-66), which reads on a sound card for a computer, wherein it obvious

Art Unit: 2644

that sound card comprises a sound chip electrically connected, therein as evident by the sound card's function, and obviously disclosed an interface is disclosed as evident by the fact that card is located with the computer.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of '813 by implementing the computer audio components for the purpose of generating audio signal to be transmitted to external speakers.

Regarding **claim 2**, '813 discloses in claim 1 a multiplexer, which reads on a multiplexer; and an A/D converter, which reads on an A/D converter.

Regarding **claim 3**, '813 discloses in claim 3 a packaging and compressing circuit, which reads on a packaging and compressing circuit.

Regarding **claim 4**, '813 discloses in claim 4 a sampling and control circuit, which reads on a sampling and control circuit.

Regarding **claim 5**, '813 discloses in claim 5 a processor, which reads on a processor.

Regarding **claim 6**, '813 discloses in claim 6 a channel selector and the processor, which reads on a channel and the processor.

Regarding **claim 7**, '813 discloses in claim 7 a diagnostic circuit, which reads on a diagnostic circuit.

Regarding **claim 8**, '813 discloses in claim 8 a timing control circuit, which reads on a timing control circuit.

Regarding **claim 9**, '813 discloses in claims 9 and 10 direct sequence spread spectrum and IEEE 802.11b networking standard, which reads on direct sequence spread spectrum and IEEE 802.11b networking standard.

Art Unit: 2644

9. Regarding **claim 11**, 813 discloses in claim 11, a signal broadcasting circuit, which reads on a signal broadcasting circuit; a 1<sup>st</sup> transceiver, which reads on a 1<sup>st</sup> transceiver; at least one multichannel wireless speaker module, which reads on multichannel wireless speaker module; a 2<sup>nd</sup> transceiver, which reads on a 2<sup>nd</sup> transceiver; a plurality of D/A converters, which reads on a plurality of D/A converters; a plurality of amplifiers, which reads on a plurality of amplifiers, and a plurality of speakers, which reads on a plurality of speakers. However, 813 fails to disclose a sound card for a computer, a sound chip, and interface (herein, computer components).

Regarding the computer components, in a similar field of endeavor, Wickle discloses a multimedia computer comprising a sound chip for generating audio signal output to external speakers (col. 2, lines 62-66), which reads on a sound card for a computer, wherein it obvious that sound card comprises a sound chip electrically connected, therein as evident by the sound card's function, and obviously disclosed an interface is disclosed as evident by the fact that card in located with the computer.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of '813 by implementing the computer audio components for the purpose of generating audio signal to be transmitted to external speakers.

Regarding **claim 12**, '813 discloses in claim 11 a multiplexer, which reads on a multiplexer; and an A/D converter, which reads on an A/D converter.

Regarding **claim 13**, '813 discloses in claim 12 a packaging and compressing circuit, which reads on a packaging and compressing circuit.

Regarding **claim 14**, '813 discloses in claim 14 a sampling and control circuit, which reads on a sampling and control circuit.

Regarding **claim 15**, '813 discloses in claim 15 a processor, which reads on a processor.

Regarding **claim 16**, '813 discloses in claim 16 a channel selector and the processor, which reads on a channel and the processor.

Regarding **claim 17**, '813 discloses in claim 17 a diagnostic circuit, which reads on a diagnostic circuit.

Regarding **claim 18**, '813 discloses in claim 19 direct sequence spread spectrum and IEEE 802.11b networking standard, which reads on direct sequence spread spectrum and IEEE 802.11b networking standard.

10. Regarding **claim 20**, 813 discloses in claim 1, a signal broadcasting circuit, which reads on a signal broadcasting circuit; a multiplexer which reads on a multiplexer, an A/D converter, which reads on an A/D converter; a 1<sup>st</sup> transceiver, which reads on a 1<sup>st</sup> transceiver; a plurality of wireless speaker modules, which reads on wireless speaker module; a 2<sup>nd</sup> transceiver, which reads on a 2<sup>nd</sup> transceiver; a D/A converter, which reads on a D/A converter; an amplifier, and a speaker. However, 813 fails to disclose a sound card for a computer, a sound chip, interface, and interface (herein, computer components).

Regarding the computer components, in a similar field of endeavor, Wickle discloses a multimedia computer comprising a sound chip for generating audio signal output to external speakers (col. 2, lines 62-66), which reads on a sound card for a computer, wherein it obvious that sound card comprises a sound chip electrically connected, therein as evident by the sound card's function, and obviously disclosed an interface is disclosed as evident by the fact that card is located with the computer.



Art Unit: 2644

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of '813 by implementing the computer audio components for the purpose of generating audio signal to be transmitted to external speakers.

This is a provisional obviousness-type double patenting rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG  
June 15, 2004

